**REMARKS**

Applicant is in receipt of the Office Action mailed May 29, 2008. Claims 1, 4, 6, and 8-30 are pending in the case. Reconsideration of the present case is earnestly requested in light of the following remarks.

**Section 102 Rejections**

Claims 1, 4, 6, and 8-30 were rejected under 35 U.S.C. 102(e) as being unpatentable over Dove et al. (US 2003/0035004, "Dove").

Claims 1 recites:

1. A computer-implemented method for programming an embedded sensor device, the method comprising,

creating a graphical program, wherein the graphical program specifies a function to be performed by the embedded sensor device, wherein the embedded sensor device comprises one or more sensors, and wherein the embedded sensor device does not include a display;

storing the graphical program on a personal digital assistant (PDA); and

transmitting the graphical program from the PDA to the embedded sensor device over a serial link;

wherein after said transmitting, the embedded sensor device is operable to execute the graphical program to perform the specified function.

Applicant respectfully notes that Dove is directed to deploying a graphical program to a portable computing device, e.g., to a PDA (personal digital assistant), whereas the subject matter of claim 1 is directed to deploying a graphical program from a PDA to an embedded sensor device.

Applicant respectfully submits that Dove fails to teach or suggest **transmitting the graphical program from the PDA to the embedded sensor device over a serial link; wherein after said transmitting, the embedded sensor device is operable to**

**execute the graphical program to perform the specified function**, as recited in claim 1.

Cited paragraph [0024] reads:

> [0024] During the conversion process, various run-time software may be used to facilitate generation of the executable from the graphical program(s). For example, this run-time software may comprise serial, interface, and file I/O software, as well as user interface software, math software, and data type software. This run-time software may be useful and/or necessary because the portable computing device may not inherently include a graphical program execution engine. Hence, the executable may require additional information that is not already contained within the data structures that correspond to the graphical programs that have been created.

Applicant notes that the above text is directed to conversion of a graphical program to a form suitable for execution on a PDA, and makes no mention whatsoever of transmitting the graphical program from the PDA to an embedded sensor device over a serial link, as claimed. Applicant respectfully directs the Examiner's attention to subsequent paragraph [0025] which reads.

> [0025] The executable may be transferred to the portable computing device, e.g., PDA. In one embodiment, this may involve using a transfer program, such as a "hot sync" program to transfer the executable to the portable computing device. In one embodiment, the portable computing device may be physically coupled to the computer system via a wire or cable, e.g., through a serial cable, and the executable may be transferred over this cable to the portable computing device. In another embodiment, the executable may be transferred in a wireless fashion to the portable computing device and deployed on the device in a wireless fashion.

As may be seen, Dove teaches transferring an executable of the graphical program *to* the PDA, not *from* the PDA to an embedded sensor device. Moreover, Applicant notes that the text cited by the Office Action regarding the embedded sensor device, paragraph [0072] (with paragraph [0071]) discloses instruments, possibly with sensors, coupled to a unit under test (UUT) and to the PDA. However, Dove nowhere describes transferring a graphical program nor an executable of a graphical program from the PDA to an

instrument, nor, more specifically, to an embedded sensor device for execution. Rather, as Dove makes clear, it is the portable computing device, e.g., PDA, that executes the graphical program. In fact, this is the primary point of Dove's invention–note that the title of Dove is "System and method for deploying a graphical program to a PDA device". Note that paragraph [0026] specifically makes this point:

> [0026] **The executable may then be executed on the portable computing device, e.g., PDA.** As noted above, a graphical program may comprise a block diagram and may further comprise a user interface or front panel. During execution of the executable on the portable computing device, the portable computing device may be operable to display at least a portion or all of the user interface or front panel of the original one or more graphical programs. The user may interact with this user interface or front panel to control the executable executing on the portable computing device. For example, where the graphical program performs a measurement function, the user interface or front panel may be used to control the graphical program to accomplish various measurement or automation functions. (*emphasis added*)

Thus, for at least the above reasons Applicant respectfully submits that Dove fails to teach or suggest all the features and limitations of claim 1, and so claim 1, and those claims respectively dependent therefrom are patentable distinct and nonobvious over the cited art, and are thus allowable.

Independent claims 28, 29, and 30 each includes similar limitations as claim 1, and so the above arguments apply with equal force to these claims. Moreover, claim 30 includes the additional limitations of analyzing the graphical program, and converting the graphical program for transmission to the sensor interface device, which are certainly not taught by the Dove. Nor does Dove teach a sensor interface device executing the converted graphical program and a hand-held computer receiving data from the sensor interface device during execution of the converted graphical program, and displaying the received data on the display of the hand-held computer, as claimed.

Thus, for at least the above reasons, Applicant submits that claims 28, 29, and 30, and those claims respectively dependent therefrom, are patentably distinct and non-obvious over the cited art, and are thus allowable.

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Applicant also asserts that numerous ones of the dependent claims recite further distinctions over the cited art.

For example, nowhere does Doveteach or suggest **wherein the embedded sensor device comprises a compact embedded sensor device between approximately 3cm x 3cm and approximately 6cm x 6cm,** as recited in claim 4.

Cited paragraph [0068] reads:

> [0068] The one or more instruments may include a GPIB instrument 112, a data acquisition (DAQ) instrument 114, a VXI instrument 116, a PXI instrument 118, a video device or camera 132, and/or a motion control device 136, among other types of devices.

As may be seen, this text in no way discloses a compact embedded sensor device between approximately 3cm x 3cm and approximately 6cm x 6cm in size. Applicant notes that it is improper for the Examiner to read in Applicant's claimed features into the cited art absent any teaching of these features in the art.

Thus, for at least the above reasons Applicant respectfully submits that Dove fails to teach or suggest all the features and limitations of claim 4, and so claim 4, and those claims respectively dependent therefrom are patentable distinct and nonobvious over the cited art, and are thus allowable.

As another example, nowhere does Dove teach or suggest **wherein said creating the graphical program is performed on the PDA,** as recited in claim 6.

Cited paragraph [0088] reads:

> [0088] As shown, in step 302 one or more graphical programs may be created. The one or more graphical programs may comprise a main graphical program and one or more sub-graphical programs. Alternatively the one or more graphical programs may comprise a plurality of graphical programs which interoperate with each other in either a client server or peer-to-peer relationship. Alternatively, only a single graphical program may be created.

The cited text describes creating graphical programs, but as Dove makes clear (see, e.g., paragraph [0103] and elsewhere), once the graphical program is created, it is

transferred to the PDA. Thus, Dove does not, and cannot, teach creating the graphical program on the PDA itself, as claimed.

Thus, for at least the above reasons Applicant respectfully submits that Dove fails to teach or suggest all the features and limitations of claim 6, and so claim 6, and those claims respectively dependent therefrom are patentable distinct and nonobvious over the cited art, and are thus allowable.

Nor does Dove teach or suggest **analyzing the graphical program for function dependencies to generate required modules; analyzing the graphical program to determine an execution sequence; and generating a flatfile based on the required modules and execution sequence, wherein the flatfile contains the functionality of the graphical program**, as recited in claim 13.

Cited paragraph [0023] discloses converting the graphical program to an executable format that can be executed by the portable computing device, e.g., to "machine language code or an interpretable script or other similar executable format".

Cited paragraph [0111] discusses converting graphical programs to text-based languages, e.g., JAVA, C, C++, etc.

However, neither of these citations, nor Dove in general, mentions analyzing a graphical program for function dependencies at all, much less doing so to generate required modules, nor analyzing the graphical program to determine an execution sequence, nor generating a flatfile based on the required modules and execution sequence. In fact, no mention is made of a flatfile at all.

Thus, for at least the above reasons Applicant respectfully submits that Dove fails to teach or suggest all the features and limitations of claim 13, and so claim 13, and those claims respectively dependent therefrom are patentable distinct and nonobvious over the cited art, and are thus allowable.

As further examples, nowhere does Dove teach or suggest **transmitting the flatfile to the embedded sensor device over the serial link**, as recited in claim 14, nor **the embedded sensor device processing the flatfile to generate an executable**, as recited in claim 15.

The cited text of paragraph [0067] discloses a portable computing device, e.g., a PDA, coupled to one or more instruments, and operating with the instruments to analyze, measure, or control a unit under test (UUT) or process. Paragraph [0111] discusses converting graphical programs to text-based languages, e.g., JAVA, C, C++, etc. However, these references, and Dove in general, make no mention whatsoever of transmitting a flatfile to an embedded sensor device, as recited in claim 14. Nor does this text, nor Dove in general, disclose an embedded sensor device processing the flatfile to generate an executable. In fact, Dove fails to mention a flatfile at all, as noted above, and also fails to even hint at an embedded sensor device generating an executable at all, much less via processing a flatfile.

Thus, for at least the above reasons Applicant respectfully submits that Dove fails to teach or suggest all the features and limitations of claims 14 and 15, and so claims 14 and 15, and those claims respectively dependent therefrom are patentable distinct and nonobvious over the cited art, and are thus allowable.

Applicant also asserts that numerous other ones of the dependent claims recite further distinctions over the cited art. However, since the independent claims have been shown to be patentably distinct, a further discussion of the dependent claims is not necessary at this time.

Removal of the section 102(e) rejection of claims 1, 4, 6, and 8-30 is respectfully requested.

**CONCLUSION**

In light of the foregoing amendments and remarks, Applicant submits the application is now in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above-referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. The Commissioner is hereby authorized to charge any fees which may be required or credit any overpayment to Meyertons, Hood, Kivlin, Kowert & Goetzel P.C., Deposit Account No. 50-1505/5150-80501/JCH.

Also filed herewith are the following items:
- ☐ Request for Continued Examination
- ☐ Terminal Disclaimer
- ☐ Power of Attorney By Assignee and Revocation of Previous Powers
- ☐ Notice of Change of Address
- ☐ Other:

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Respectfully submitted,

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